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**PATENT** PD-980034

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Donald C.D. Chang et al. : Date:

: Group Art Unit: 3662 Serial No.: 09/497,865

Filed: February 4, 2000 : Examiner: Issing, Gregory C.

For: AN IMPROVED PHASED ARRAY TERMINAL FOR **EQUATORIAL SATELLITE CONSTELLATIONS** 

### SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. 1.97 (c) WITH PAYMENT OF FEE UNDER 37 C.F.R. 1.17 (p)

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

The attention of the Office is drawn to the references listed on the accompanying PTO-1449 form (copies enclosed). These references were cited in an International Search Report dated January 28, 2004, PCT application (EP 01101660.7-2220). Please refer to the indications of allegedly relevant passages identified in the Search Report.

This Information Disclosure Statement is not to be construed as a representation that a search has recently been made, that additional information material to the examination of this application does not exist, or that this citation constitutes prior art?

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#### PAYMENT OF FEE SET FORTH IN § 1.17 (p)

Please charge Deposit Account No. 50-0383 of Hughes Electronics Corporation, El Segundo, California, in the amount of \$180.00. The Commissioner is hereby authorized to charge any additional fees, which may be required, or credit any overpayment, to that account. **This form is being submitted in duplicate.** 

Respectfully submitted, DONALD C.D. CHANG, et al

Bv:

Georgann S. Grunebach Attorney for Applicant Registration No. 33,179

Enclosure: Form PTO-1449 w/references HUGHES ELECTRONICS CORPORATION RE/R11/A109 P.O. Box 956 El Segundo, CA 90245-0956 (310) 964-4615



PTO/SB/08A (08-03) Approved for use through 07/31/2006. OMB 0651-0031

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Substitute for form 1449/PTO

Sheet 1

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known		
Application Number	09/497,865	
Filing Date	February 4, 2000	
First Named Inventor	Donald C.D. Chang	
Art Unit	3662	
Examiner Name	Issing, Gregory C.	
Attorney Docket Number	PD-980034	

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Examiner Initials*	Cite No. <sup>1</sup>	Document Number  Number-Kind Code <sup>2 (f known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US- 3,673,606	06-27-1972	Maune, James J.	
		<sup>US-</sup> 3,720,953	03-13-1973	Ajioka, James S.	
		<sup>US-</sup> 4,926,186	05-15-1990	Kelly, Robert J.	
		<sup>US-</sup> 5,077,562	12-31-1991	Von de Embse, Urban	
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Cite No.1	ite Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
	Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	MM-DD-YYYY		Or Relevant Figures Appear	٦۴
	EP 0 190927 A	08-13-1986	Natni Res Dev		
	EP 0 647976 A	04-12-1995	Nippon Steel Co		
	WO 9733342 A	09-12-1997	Nippon Steel Co		
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	Application Number	09/497,865	
INFORMATION DISCLOSURE	Filing Date	February 4, 2000	
STATEMENT BY APPLICANT	First Named Inventor	Donald C.D. Chang	
(Use as many sheets as necessary)	Art Unit	3662	
(ose as many sheets as necessary)	Examiner Name	Issing, Gregory C.	
Sheet 2 of 2	Attorney Docket Number	PD-980034	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		MIURA, RYU EL AL.: "BEAMFORMING EXPERIMENT WITH A DBF MULTIBEAM ANTENNA IN A MOBILE SATELLITE ENVIRONMENT" IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, IEEE INC. NEW YORK,	
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